



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|-------------------------|---------------------|-------------------|
| 10/043,540 | 01/11/2002 | John William Richardson | PU 020013 | 7304 |
| 7590 JOSEPH S. TRIPOLI THOMSON MULTIMEDIA LICENSING INC. 2 INDEPENDENCE WAY P.O. BOX 5312 PRINCETON, NJ 08543-5312 | | | EXAMINER | JEAN GILLES, JUDE |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2143 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 02/27/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | |
|------------------------------|---------------------------------|--------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/043,540 | RICHARDSON, JOHN WILLIAM |
| | Examiner Jude J. Jean-Gilles | Art Unit 2143 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 November 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 5,6,14 and 15 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5,8-14 and 16-19 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Action is in regards to the Reply received on 11/22/2006.

Claim Objections

1. Claims 7 and 16 are objected to because of the following informalities:

Claim 7 improperly depends on claim 6 which has been deleted. In order to proceed with the examination of the claim, the Examiner assumes claim 7 depends on claim 1.

Claim 16 improperly depends on claim 14 which has been deleted. In order to proceed with the examination of the claim, the Examiner assumes claim 16 depends on claim 11.

Appropriate correction is required.

Response to Amendment

2. This action is responsive to the application filed on 01/11/2002. Claims 1 and 1 have been amended. There are no newly added claims. Claims 5, 6, 14, and 15 have been cancelled. Claims 1-4, 7-13, and 16-19 are pending, and represent a method and apparatus for a "Physical Layer recovery in a streaming data delivery system."

Response to argument

3. Applicants have presented no arguments with respect to the rejection mainly because claims **1-5, 8-14 and 16-19** were rejected in the Previous Office action and claims 6, 7 and 15 were indicated allowable if rewritten in independent form.

The Examiner thanks the applicants for the following: Claim 1 has been amended to incorporate the subject matter of Claims 5 and 6; and Claim 11 has been amended to incorporate the subject matter of Claims 14 and 15. However, in light of the prior art references resulting from an updated search, the Examiner respectfully withdraws the allowability of claims 1 and 11 (see notice of cited reference PTO form 892 and the rejection of claim 1 and 11 below).

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must show the amendments avoid such references or objections."

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-4, 7-13, and 16-19** are rejected under 35 U.S.C. 102(b) as being anticipated by Mendelson et al (Mendelson), Patent No. 6,636,249 B1.

Regarding **claim 1-4, 7-13, and 16-19**, Mendelson discloses:

1. (Currently Amended) An asynchronous transfer mode (ATM) digital document delivery system (figs. 1 and 7), comprising:

a customer premise unit configured to permit a customer to order and receive a data stream (fig. 1, item 122; column 4, lines 19-22);

a buffer coupled to the customer premise unit to store the data stream before transmitting the data stream to a customer (fig. 7, item 711; column 1, lines 55-65);

a server having digital documents stored thereon for delivery to the customer through a switched ATM network (fig. 1, item 110; column 4, lines 23-33);
[and]

means for controlling a data rate of the data stream between the server and the buffer to ensure maintenance of a steady data stream from the customer premise unit to the customer during a loss of a physical layer between the server and the customer premise unit, the means for controlling includes a network control system coupled to the server and the customer premise unit, the network control system providing control for the data rate of the data stream to the customer premise unit-from the server, and a multiplexer coupled between the customer premise unit and the network control system (fig. 7; 714; 734), the multiplexer including a signaling mechanism to alert at least one component that the physical layer is lost (column 1, lines 55-67; continue in column 2 until line 46).

2. (Original) The document delivery system, as recited in claim 1, wherein the customer premise unit includes the buffer therein, the buffer including a memory storage capacity sufficient to maintain the data stream to a customer for an amount of time (fig. 7, item 711; column 55-67; continue in column 2 until line 46).

3. (Original) The document delivery system, as recited in claim 2, wherein the amount of time includes time needed to restore the physical layer (fig. 7, item 711; column 36-67).
4. (Original) The document delivery system, as recited in claim 2, wherein the amount of time includes up to 30 seconds (fig. 2; column 5, lines 1-17).
7. (Original) The document delivery system, as recited in claim 1, further comprising virtual circuits set up between the network control system, the customer premise unit and the multiplexer to enable communication therebetween (items 132; 711; column 1, lines 36-67).
8. (Original) The document delivery system, as recited in claim 1, wherein the server is configured to deliver the data stream at a rate greater than a normal rate after the physical layer has been restored (column 1, lines 36-67).
9. (Original) The document delivery system, as recited in claim 8, wherein the server is configured to deliver the data stream at the normal rate after the buffer has been filled (column 1, lines 36-67 continue in column 2 until line 46).
10. (Original) The document delivery system, as recited in claim 1, wherein the customer premise unit is configured to deliver the data stream at a rate less than a normal rate when the physical layer is lost.
11. (Currently Amended) A method for maintaining a data stream over an asynchronous transfer mode (ATM) network (figs. 1 and 7), comprising the steps of: providing a customer premise unit configured to permit a customer to receive a data stream (fig. 1, item 122; column 4, lines 19-22);

storing a portion of the data stream in a buffer before transmitting the data stream to a customer (fig. 7, item 711; column 1, lines 55-65);

transmitting the data stream from a server through a switched ATM network (fig. 1, item 110; column 4, lines 23-33); and

controlling a data rate of the data stream between the server and the buffer to ensure maintenance of a steady data stream from the customer premise unit to a customer during a loss of a physical layer between the server and the customer premise unit, the controlling includes employing a network control system coupled to the server and the customer premise unit, the network control system providing control for the data rate of the data stream to the customer premise unit from the server, a multiplexer coupled between the customer premise unit and the network control system, and further comprising the step of: when the physical layer is lost, signaling from the multiplexer to alert at least one component that the physical layer is lost (fig. 7; 714; 734; column 1, lines 55-67; continue in column 2 until line 46).

12. (Original) The method as recited in claim 11, wherein the step of controlling a data rate of the data stream includes maintaining an amount of data from the data stream in the buffer to continue data flow to a customer for an amount of time after the loss of the physical layer (fig. 7, item 711; column 1, lines 55-67; continue in column 2 until line 46).

13. (Original) The method as recited in claim 12, wherein the amount of time includes time needed to restore the physical layer (fig. 7, item 711; column 1, lines 36-67).

16. (Original) The method as recited in claim 11, further comprising the step of setting up virtual circuits between the network control system, the customer premise unit and the multiplexer to enable communication therebetween (items 132; 711; column 1, lines 36-67).

17. (Original) The method as recited in claim 11, further comprising the step of delivering the data stream from the server at a rate greater than a normal rate after the physical layer has been restored (fig. 7, item 711; column 36-67).

18. (Original) The method as recited in claim 17, further comprising the step of delivering the data stream at the normal rate after the buffer has been filled (column 1, lines 36-67 continue in column 2 until line 46).

19. (Original) The method as recited in claim 11, further comprising the step of delivering the data stream from the customer premise unit to a customer at a rate less than a normal rate when the physical layer is lost (column 1, lines 36-67 continue in column 2 until line 46).

Conclusion

6. **THIS ACTION IS MADE NON-FINAL.** Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-9000.

Jude Jean-Gilles
Patent Examiner
Art Unit 2143



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

JJG
February 07, 2007